

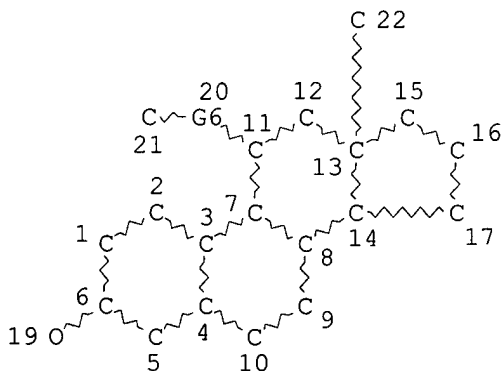
=> fil hcaplus  
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FILE COVERS 1907 - 31 Mar 2003 VOL 138 ISS 14  
 FILE LAST UPDATED: 30 Mar 2003 (20030330/ED)

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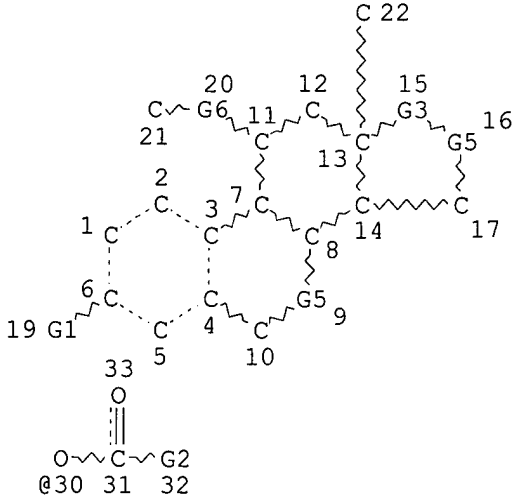


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 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
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 NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE  
 L5 303 SEA FILE=REGISTRY SSS FUL L3  
 L6 STR

*antecedent*  
 2/10/1



CH~G4  
@23 24

HO~CH  
25 @26

HO~C~G4  
27 @28 29

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 VAR G3=26/28  
 VAR G4=AK/CY  
 VAR G5=CH2/23  
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 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
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 NUMBER OF NODES IS 32

STEREO ATTRIBUTES: NONE  
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 L8 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L7

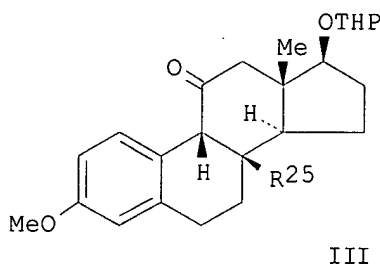
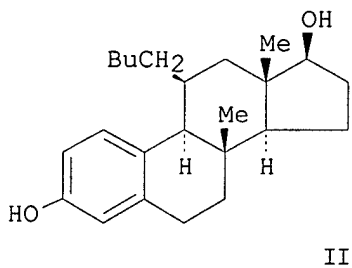
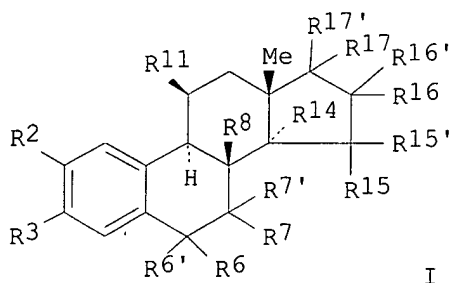
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=> d ibib abs hitrn l8 1-12

L8 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 2001:763026 HCAPLUS  
 DOCUMENT NUMBER: 135:318607  
 TITLE: Preparation of 8.beta.-substituted-11.beta.-pentyl-  
 and 11.beta.-hexyl-estra-1,3,5(10)-triene derivatives  
 which have an affinity for the estrogen receptor  
 INVENTOR(S): Peters, Olaf; Braeuer, Nico; Hillisch, Alexander;  
 Hegele-Hartung, Christa; Fritze-meier, Karl-Heinrich  
 PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany  
 SOURCE: PCT Int. Appl., 53 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2001077138 A1 20011018 WO 2001-EP4289 20010412  
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CO, CR, CU, CZ, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
DE 10019167 A1 20011018 DE 2000-10019167 20000412  
EP 1272505 A1 20030108 EP 2001-940331 20010412  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
NO 2002004907 A 20021205 NO 2002-4907 20021011  
PRIORITY APPLN. INFO.: DE 2000-10019167 A 20000412  
US 2000-207370P P 20000526  
WO 2001-EP4289 W 20010412  
OTHER SOURCE(S): MARPAT 135:318607  
GI



AB The present invention relates to the novel 8.beta.-substituted estra-1,3,5(10)-trienes I [R2 = H, F, Cl, Br, I, straight or branched (un)satd. C1-6-alkyl, OH, alkoxy, acyloxy, CF3, sulfamoyloxy; R3 = alkoxy, sulfamoyloxy, acyloxy; R6, R6' = H; R6R7 = bond; R7, R7' = H; R8 means a straight-chain or branched-chain, optionally partially or entirely halogenated alkyl or alkenyl radical having up to 5 carbon atoms, an ethynyl or prop-1-ynyl radical; R11 = pentyl, hexyl; R14 = H; R14R15 = bond; R15 = H; R15', R16' = H, F, Cl, Br, I, alkoxy, sulfamoyloxy, acyloxy; R15R16 = bond; R16 = H; R17, R17' = H, H and halogen, H and OCH2Ph, H and sulfamoyloxy; alkyl and acyl or acyloxy; alkoxy and alkyl, alkoxy and acyloxy; R17R17' = CH2 CR23R24; R23, R24 = H, halogen; R23R24 = O]. Thus, 8.beta.-methyl-11.beta.-pentyl-1,3,5(10)-triene-3,17.beta.-diol (II) was prepd. from 8.beta.-cyanosteroid III (R25 = CN) via condensation of 11-ketosteroid III (R25 = Me) with BuCH2Li. Estradienes I are used as pharmaceutical active agents which, in vitro, are provided with a higher

affinity of estrogen receptor preps. of rat prostate than of estrogen receptor preps. of rat uterus and, in vivo, preferably act in a preferential contraceptive manner on the ovary without stimulating the uterus. The invention also relates to the prodn. thereof, the therapeutic use thereof and pharmaceutical administration forms which contain the novel compds. I. The invention further relates to the use of compds. I for male contraception and to the use of non-malignant or malignant proliferate diseases of the ovary, such as ovarian carcinoma or granulosa cell tumors for instance.

IT 367269-66-7P, 8.beta.-Methyl-11.beta.-pentylestra-1,3,5(10)-triene-3,17.beta.-diol 367269-67-8P, 11.beta.-Hexyl-8.beta.-methylestra-1,3,5(10)-triene-3,17.beta.-diol 367269-79-2P, 11.beta.-Pentyl-8.beta.-vinylestra-1,3,5(10)-triene-3,17.beta.-diol 367269-80-5P, 11.beta.-Hexyl-8.beta.-vinylestra-1,3,5(10)-triene-3,17.beta.-diol 367269-81-6P, 8.beta.-Ethyl-11.beta.-pentyl-1,3,5(10)-triene-3,17.beta.-diol 367269-82-7P, 8.beta.-Ethyl-11.beta.-hexyl-1,3,5(10)-triene-3,17.beta.-diol 367269-89-4P, 8.beta.-Methyl-11.beta.-pentyl-1,3,5(10)-triene-3,17.beta.-diol 3-acetate 367269-90-7P, 8.beta.-Ethyl-11.beta.-pentyl-1,3,5(10)-triene-3,17.beta.-diol 3-acetate 367269-91-8P, 11.beta.-Pentyl-8.beta.-vinyl-1,3,5(10)-triene-3,17.beta.-diol 3-acetate 367269-92-9P, 11.beta.-Hexyl-8.beta.-methyl-1,3,5(10)-triene-3,17.beta.-diol 3-acetate 367269-93-0P, 8.beta.-Ethyl-11.beta.-hexyl-1,3,5(10)-triene-3,17.beta.-diol 3-acetate 367269-94-1P, 11.beta.-Hexyl-8.beta.-vinyl-1,3,5(10)-triene-3,17.beta.-diol 3-acetate  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of 8.beta.-substituted-11.beta.-pentyl- and -11.beta.-hexyl-estra-1,3,5(10)-triene derivs. which have an affinity for the estrogen receptor)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 2001:435020 HCAPLUS  
 DOCUMENT NUMBER: 135:19815  
 TITLE: Preparation of anti-estrogen compounds having hydroxycarbonyl-halogenoalkyl side chain  
 INVENTOR(S): Jo, Jaechon; Kwon, Heean; Lim, Hyunsuk; Choi, Jaeyoung; Morikawa, Kazumi; Kanbe, Yoshitake; Nishimoto, Masahiro; Kim, Myunghwa; Nishimura, Yoshikazu  
 PATENT ASSIGNEE(S): C + C Research Laboratories, S. Korea  
 SOURCE: PCT Int. Appl., 139 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001042186	A1	20010614	WO 2000-JP8810	20001213
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

AU 2001018883	A5	20010618	AU 2001-18883	20001213
EP 1241158	A1	20020918	EP 2000-981681	20001213
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 3357356	B2	20021216	JP 2001-54388	20001213
JP 2003040834	A2	20030213	JP 2002-199200	20001213
NO 2002002783	A	20020813	NO 2002-2783	20020611
PRIORITY APPLN. INFO.:			JP 1999-353640	A 19991213
			JP 2000-100567	A 20000403
			JP 2000-186684	A 20000621
			JP 2000-232091	A 20000731
			JP 2000-357793	A 20001124
			JP 2001-543488	A3 20001213
			WO 2000-JP8810	W 20001213
OTHER SOURCE(S):		MARPAT 135:19815		
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Compds. in which either a compd. having reduced oral activity or a group having a framework thereof is chem. bonded to a group represented by the general formula (CH<sub>2</sub>)<sub>m</sub>CH(CO<sub>2</sub>R<sub>1</sub>)(CH<sub>2</sub>)<sub>n</sub>R<sub>2</sub> (wherein R<sub>1</sub> represents hydrogen, metal forming a salt; R<sub>2</sub> represents linear or branched C<sub>1</sub>-7 halogenoalkyl; m is an integer of 2 to 14; and n is an integer of 2 to 7), optical isomers of the compds.; or hydrates or pharmacol. acceptable salts of these compds. are prepd. When imparted to a framework of, e.g., estradiol Q or Q<sub>1</sub>, 2-(p-hydroxyphenyl)-6-naphthol Q<sub>2</sub>, or 2-(4-hydroxyphenyl)-2-(4-hydroxybenzoyl)-6-hydroxybenzo[b]thiophene Q<sub>3</sub>, etc., a compd. having anti-estrogen activity, those compds. represented by formula A-(CH<sub>2</sub>)<sub>m</sub>CH(CO<sub>2</sub>R<sub>1</sub>)(CH<sub>2</sub>)<sub>n</sub>R<sub>2</sub> (A = Q, Q<sub>1</sub>, Q<sub>2</sub>, Q<sub>3</sub>, etc.), a compd. having anti-estrogen activity, those can have significantly improved oral activity. The compds. are hence useful as antitumor agents, in particular for the treatment of breast cancer. Thus, cross-metathesis of 3-methoxy-7.alpha.-(2-propenyl)estra-1,3,5(10)-trien-17.beta.-ol with (4R,5S)-3,4-dimethyl-1-[(2S)-2-(4,4,5,5,6,6,7,7,7-nonafluoroheptyl)-8-nonenoyl]-5-phenylimidazolidin-2-one in the presence of Grubbs' catalyst followed by hydrogenation oxidative hydrolysis, and demethylation gave (2S)-10-(3,17.beta.-dihydroxyestra-1,3,5(10)-trien-7.alpha.-yl)-2-(4,4,5,5,6,6,7,7,7-nonafluoroheptyl)decanoic acid (I). I at 10 mg/kg p.o. per day for 3 days inhibited by 100% the 17.beta.-estradiol benzoate-stimulated increase in the uterus wt. in mice.

IT 342898-68-4P 342898-92-4P 342898-96-8P  
342898-97-9P 342898-98-0P 342898-99-1P  
342899-00-7P 342899-25-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of anti-estrogen compds. having hydroxycarbonyl-haloalkyl side chain as antitumor agents for treatment of breast cancer with improved oral activity)

IT 342898-67-3P 342898-91-3P 342899-24-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. of anti-estrogen compds. having hydroxycarbonyl-haloalkyl side chain as antitumor agents for treatment of breast cancer with improved oral activity)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2001:190285 HCAPLUS  
 DOCUMENT NUMBER: 134:261332  
 TITLE: QSAR with electrotopological state atom index.  
 Part-3a. Receptor binding affinity of estrogens and  
 non-steroidal estrogen analogs  
 AUTHOR(S): Saha, Achintya; Roy, Kunal; De, Kakali; Sengupta,  
 Chandana  
 CORPORATE SOURCE: Dep. Chemical Technology, Univ. Calcutta, alcutta, 700  
 009, India  
 SOURCE: Journal of the Indian Chemical Society (2001), 78(2),  
 92-97  
 CODEN: JICSAH; ISSN: 0019-4522  
 PUBLISHER: Indian Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Quant. structure activity relationship (QSAR) anal. of estrogens and  
 non-steroidal analogs of estrogen with electrotopol. state atom (ETSA)  
 index has been performed to explore the atoms or fragments of the mols.  
 that are most important for the binding affinity to receptor. The study  
 reveals the importance of Ph ring fragment (C1, C5 and C10 atoms of  
 steroidal estrogen, and C1, C3, C4, C9 and C10 atoms in case of  
 non-steroidal analogs) for receptor binding affinity. The importance of  
 these atoms or fragments is also supported from the literature survey.  
 Thus, the Ph ring constitutes the pharmacophore for receptor binding  
 affinity of estrogen analogs. Hence, diagnostic potential of the ETSA  
 scheme in identifying the atoms or fragments important for activity is  
 revealed from the study.

IT 134411-55-5 134411-57-7  
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological  
 process); BSU (Biological study, unclassified); PRP (Properties); BIOL  
 (Biological study); PROC (Process)  
 (QSAR with electrotopol. state atom index in relation to receptor  
 binding affinity of estrogens and non-steroidal estrogen analogs)  
 REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

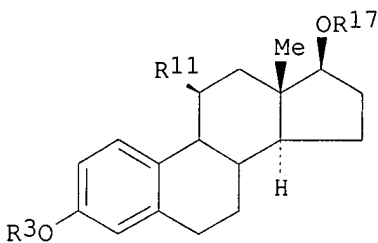
L8 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:909685 HCAPLUS  
 DOCUMENT NUMBER: 134:56837  
 TITLE: Methods for the production of long-chain substituted  
 estratriene and their application in the preparation  
 of medicaments  
 INVENTOR(S): Sauer, Gerhard; Bohlmann, Rolf; Heinrich, Nikolaus;  
 Kroll, Jorg; Zorn, Ludwig; Fritzsche, Karl-Heinrich;  
 Hegele-Hartung, Christa; Hoffmann, Jens; Lichtner,  
 Rosemarie  
 PATENT ASSIGNEE(S): Schering A.-G., Germany  
 SOURCE: Ger. Offen., 16 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

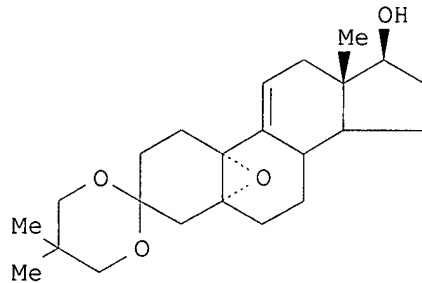
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19929715	A1	20001228	DE 1999-19929715	19990624
WO 2001000652	A2	20010104	WO 2000-EP5969	20000626
WO 2001000652	A3	20010510		

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 IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
 MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,

SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 AU 2000061524 A5 20010131 AU 2000-61524 20000626  
 EP 1187846 A2 20020320 EP 2000-947882 20000626  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO  
 JP 2003503419 T2 20030128 JP 2001-507059 20000626  
 NO 2001006330 A 20020131 NO 2001-6330 20011221  
 PRIORITY APPLN. INFO.: DE 1999-19929715 A 19990624  
 WO 2000-EP5969 W 20000626  
 OTHER SOURCE(S): MARPAT 134:56837  
 GI



I



II

AB This invention describes the synthesis of new antiestrogenic 11.beta. long-chain substituted estratriene [I; R3 = H, alkyl, R3'C(O); R3' = H, alkyl, ph; R11 = ABZR20; A = bond, phenylene, phenyleneoxy; B = alkylene, alkenylene, alkynylene; Z = NR21; R21 = alkyl; R20 = H, alkyl, alkenyl, -alkynyl, DCnFn+1; D = aryl, alkylene, alkenylene, alkynylene; n = 1 - 8; R20 = LCH=CFCpF2p+1; L = alkylene, alkenylene, alkynylene; p = 2-7; R20 = DO(CH2)q-aryl; q = 0 - 3; aryl = Ph, 1-naphthyl, 2-naphthyl, heteroaryl; DO(CH2)rCnF2n+1; r = 1 - 5; R20R21 with N = C5-C6-heterocycle; R20R21 with N = heterocycle etc.; R17 = H, R17'C(O); R17' = H, alkyl] for the prodn. of medicaments. Thus, I [R3, R17 = H; R11 = F5C2(CH2)3S(CH2)3N(Me)(CH2)5] was prepd. from epoxyestrene (II) via reaction with 1-bromo-5-tert-butyl dimethylsilyloxypentane, aromatization, chlorination and amination with methyl(3-[(4,4,5,5,5-pentafluoropentyl)sulfanyl]propyl)amine. Formulations of I (no data) are claimed.

IT 314019-28-8P 314019-30-2P 314019-32-4P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (prepn. of long-chain substituted estratriene and their application in the prepn. of medicaments)

IT 151555-65-6P 314019-26-6P 314019-27-7P  
 314019-29-9P 314019-31-3P 314019-33-5P  
 314019-58-4P 314019-59-5P 314019-60-8P  
 314019-61-9P 314019-62-0P 314019-63-1P  
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 314019-67-5P 314019-68-6P 314019-69-7P  
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 314019-76-6P 314019-77-7P 314019-78-8P  
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 314019-82-4P 314019-83-5P 314019-84-6P  
 314019-85-7P 314019-86-8P 314019-87-9P

314019-88-0P 314019-89-1P 314019-90-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of long-chain substituted estratriene and their application in the prepn. of medicaments)

IT 314019-42-6P 314019-43-7P 314019-45-9P

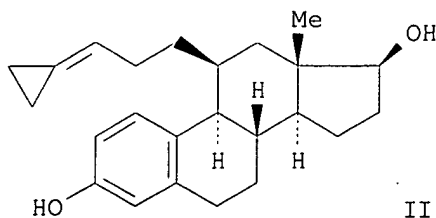
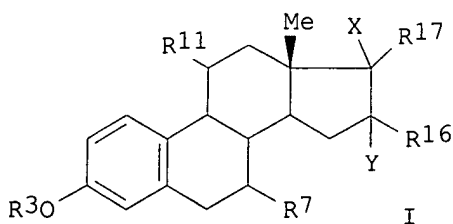
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of long-chain substituted estratriene and their application in the prepn. of medicaments)

L8 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:368399 HCAPLUS  
 DOCUMENT NUMBER: 133:4848  
 TITLE: Preparation of estrogenic estra-1,3,5(10)-trienes with differential effects on the .alpha. and .beta. estrogen receptors, having a linear hydrocarbon chain of from 5-9 carbon atoms in position 11  
 INVENTOR(S): Loozen, Hubert Jan Jozef; Schoonen, Wilhelmus Gerardus Eduardus Joseph  
 PATENT ASSIGNEE(S): Akzo Nobel N.V., Neth.  
 SOURCE: PCT Int. Appl., 24 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000031112	A1	20000602	WO 1999-EP9053	19991118
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1131336	A1	20010912	EP 1999-963327	19991118
EP 1131336	B1	20020828		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AT 222922	E	20020915	AT 1999-963327	19991118
PRIORITY APPLN. INFO.: EP 1998-203914 A 19981120				
WO 1999-EP9053 W 19991118				
OTHER SOURCE(S): MARPAT 133:4848				
GI				



AB Novel 11.beta.-substituted estradiols of formula I [R3 = H, acyl, aroyl; R7, R16, R17 = H, alkyl, cycloalkyl, alkenyl, alkynyl, aryl; R11 = linear



or branched hydrocarbon chain; X, Y = H, OH] are prepd. The resulting compds. have a desirable mixed agonist/antagonist profile for estrogen receptor .alpha. and estrogen receptor .beta.. Thus, II was prepd. and was an agonist for ER.alpha. and an antagonist for ER.beta..

IT 271259-96-2P 271260-03-8P 271260-07-2P  
271260-09-4P 271260-12-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of estrogenic 11-substituted estratrienes with differential effects on estrogen receptors)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:576677 HCAPLUS  
DOCUMENT NUMBER: 127:171883  
TITLE: Method of treating alopecia  
INVENTOR(S): Smart, Robert C.; Oh, Hye-sun  
PATENT ASSIGNEE(S): North Carolina State University, USA; Smart, Robert C.; Oh, Hye-Sun  
SOURCE: PCT Int. Appl., 39 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9730697	A1	19970828	WO 1997-US2385	19970218
W: AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2247258	AA	19970828	CA 1997-2247258	19970218
AU 9720513	A1	19970910	AU 1997-20513	19970218
AU 725243	B2	20001012		
EP 938296	A1	19990901	EP 1997-908659	19970218
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000505454	T2	20000509	JP 1997-530248	19970218
US 6204258	B1	20010320	US 1999-257396	19990225
PRIORITY APPLN. INFO.:				
			US 1996-604448	A1 19960221
			WO 1997-US2385	W 19970218

OTHER SOURCE(S): MARPAT 127:171883

AB A method of enhancing hair growth or treating alopecia in a subject uses topically administered estrogen receptor antagonists. Within 3 wk, topical application of the estrogen receptor antagonist ICI 182780 (10 nmol, twice weekly) induced full hair regrowth on clipped dorsal skin of 60% of the treated mice, as compared to 40% of the vehicle only treated mice.

IT 134411-55-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(alopecia treatment with estrogen receptor antagonists)

L8 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2003 ACS

*X*  
*10 carbons*

ACCESSION NUMBER: 1997:435821 HCAPLUS  
DOCUMENT NUMBER: 127:76140  
TITLE: Steroidal Affinity Labels of the Estrogen Receptor. 3. Estradiol 11.beta.-n-Alkyl Derivatives Bearing a Terminal Electrophilic Group: Antiestrogenic and Cytotoxic Properties  
AUTHOR(S): Lobaccaro, Carole; Pons, Jean-Francois; Duchesne, Marie-Josephe; Auzou, Gilles; Pons, Michel; Nique, Francois; Teutsch, Georges; Borgna, Jean-Louis  
CORPORATE SOURCE: INSERM Unite 439, Montpellier, 34090, Fr.  
SOURCE: Journal of Medicinal Chemistry (1997), 40(14), 2217-2227  
CODEN: JMCMAR; ISSN: 0022-2623  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB With the aim of developing a new series of steroidal affinity labels of the estrogen receptor, six electrophilic 11.beta.-Et (C2), 11.beta.-Bu (C4), or 11.beta.-decyl (C10) derivs. of estradiol bearing 11.beta.-terminal electrophilic functionalities, i.e. bromine (C4), (methylsulfonyl)oxy (C2 and C4), bromoacetamido (C2 and C4), and (p-tolylsulfonyl)oxy (C10) were synthesized. The range of their affinity consts. for binding the estrogen receptor was 0.4-37% that of estradiol; the order of increasing affinity (i) relative to the 11.beta.-alkyl arm was Et < Bu and (ii) relative to the electrophilic functionalities was bromoacetamido < bromine < (methylsulfonyl)oxy. Regardless of the conditions used, including prolonged exposure of the receptor to various pH levels (7-9) and temps. (0-25.degree.), the extent of receptor affinity labeling by the 11.beta.-Et and 11.beta.-Bu compds., if any, was under 10%. This was in sharp contrast to results obtained using 11.beta.-((tosyloxy)decyl)estradiol which labeled from 60% to 90% of the receptor hormone-binding sites with an EC50 of .apprx.10 nM. Estrogenic and antiestrogenic activities of the compds. were detd. using the MVLN cell line, which was established from the estrogen-responsive mammary tumor MCF-7 cells by stable transfection of a recombinant estrogen-responsive luciferase gene. The two 11.beta.-Et compds. were mainly estrogenic, whereas the three 11.beta.-Bu and the 11.beta.-decyl compds. essentially showed antiestrogenic activity. The fact that the chem. reactivities of 11.beta.-Et and 11.beta.-Bu compds. were not compromised by interaction with the estrogen receptor made the synthesized high-affinity compds. potential cytotoxic agents which might be able to exert either (i) a specific action on estrogen-regulated genes or (ii) a more general action in estrogen-target cells. Therefore the ability of the compds. (1) to irreversibly abolish estrogen-dependent expression of the luciferase gene and (2) to affect the proliferation of MVLN cells was detd. All electrophiles were able to irreversibly suppress expression of the luciferase gene; the antiestrogenic electrophiles were more potent than the estrogenic ones but less efficient than 4-hydroxytamoxifen, a classical and chem. inert triphenylethylene antiestrogen. Only the antiestrogenic electrophiles decreased cell proliferation; however, they were less potent than 4-hydroxytamoxifen. In conclusion, the synthesized electrophilic estradiol 11.beta.-Et and 11.beta.-Bu derivs. (i) were not efficient affinity labels of the estrogen receptor and (ii) did not display significant cytotoxicity in estrogen-sensitive mammary tumor cells. However, since these derivs. displayed high affinity for the estrogen receptor, they could be used to prep. potential cytotoxic agents which might be selective for tumors affecting estrogen-target tissues, by coupling them with a toxic moiety.

IT 191486-92-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

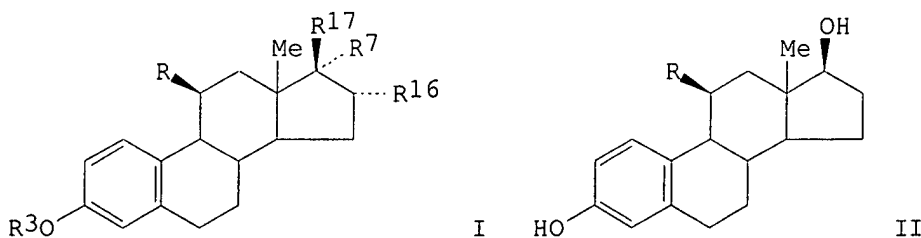
10  
Carbons  
X

(prepn. of estradiol 11.beta.-n-alkyl derivs. as steroidal affinity labels of the estrogen receptor)

L8 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 1994:31023 HCAPLUS  
 DOCUMENT NUMBER: 120:31023  
 TITLE: Preparation of 11.beta.-thiahydrocarbyl-19-norsteroids and analogs as drugs  
 INVENTOR(S): Claussner, Andre; Nique, Francois; Teutsch, Jean Georges; Van de Velde, Patrick  
 PATENT ASSIGNEE(S): Roussel-UCLAF, Fr.  
 SOURCE: PCT Int. Appl., 82 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9313123	A1	19930708	WO 1992-FR1193	19921217
W: AU, CA, FI, HU, JP, KR, NZ, RU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2685332	A1	19930625	FR 1991-15856	19911220
FR 2685332	B1	19950602		
IL 104105	A1	19970713	IL 1992-104105	19921215
AU 9333570	A1	19930728	AU 1993-33570	19921217
AU 666916	B2	19960229		
EP 623140	A1	19941109	EP 1993-902339	19921217
EP 623140	B1	19980422		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
HU 68068	A2	19950529	HU 1994-2134	19921217
HU 221482	B	20021028		
AT 165365	E	19980515	AT 1993-902339	19921217
RU 2111213	C1	19980520	RU 1994-31162	19921217
ES 2115754	T3	19980701	ES 1993-902339	19921217
ZA 9209859	A	19931220	ZA 1992-9859	19921218
CN 1075722	A	19930901	CN 1992-115248	19921219
CN 1036718	B	19971217		
US 6281204	B1	20010828	US 1994-244735	19940609
FI 9402944	A	19940617	FI 1994-2944	19940617
US 2002072624	A1	20020613	US 2001-891433	20010626
PRIORITY APPLN. INFO.:			FR 1991-15856	A 19911220
			WO 1992-FR1193	A 19921217
			US 1994-244735	A3 19940609

OTHER SOURCE(S): MARPAT 120:31023  
 GI



AB Title compds. [I; R = XYSOmZ; R3 = H, (cyclo)alkyl, acyl; R7 = H, alkyl, alkenyl, alkynyl, etc.; R16 = H, halo, alkyl; R17 = OH, CH2OH, acyloxy; R7R17 = O, NOH, NNH2, CH2; X = CH2, arylene(oxy); Y = (O-

interrupted (satd.) divalent C1-18 aliph. group; Z = (ar)alkyl, aryl; m = 0-2] were prepd. as antiestrogens, antiproliferatives, etc. Thus, 11.beta.-(4-hydroxyphenyl)estra-4,9-diene-3,17-dione was condensed with Cl(CH<sub>2</sub>)<sub>5</sub>Br and the product converted in 3 steps to estratrienediol II [R = C<sub>6</sub>H<sub>4</sub>[O(CH<sub>2</sub>)<sub>5</sub>Cl]-4] which was condensed with 2-pyridylmethanethiol to give, after oxidn., II [R = C<sub>6</sub>H<sub>4</sub>[O(CH<sub>2</sub>)<sub>5</sub>SOZ]-4, Z = 2-pyridylmethyl]. The latter had relative binding affinity (definition given) of 21.2 at mouse estrogen receptors in vitro.

IT 151556-15-9P 151556-16-0P 151556-41-1P  
151556-42-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and reaction of, in prepn. of antiestrogen and antiproliferative)

IT 151555-16-7P 151555-25-8P 151555-26-9P  
151555-27-0P 151555-28-1P 151555-54-3P  
151555-65-6P 151555-76-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as antiestrogen and antiproliferative)

*X longer than 3 carbon*

L8 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1992:401107 HCAPLUS

DOCUMENT NUMBER: 117:1107

TITLE: 11.beta.-Amidoalkyl estradiols, a new series of pure antiestrogens

AUTHOR(S): Claussner, A.; Nedelec, L.; Nique, F.; Philibert, D.; Teutsch, G.; Van de Velde, P.

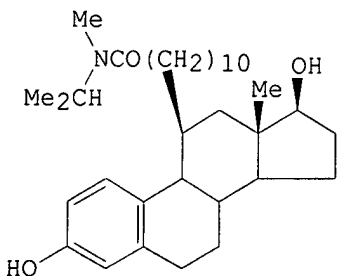
CORPORATE SOURCE: Cent. Rech., Roussel UCLAF, Romainville, 93230, Fr.  
SOURCE: Journal of Steroid Biochemistry and Molecular Biology (1992), 41(3-8), 609-14

CODEN: JSBBEZ; ISSN: 0960-0760

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



I

AB In order to find new antiestrogens, devoid of any agonistic activity, a series of 11.beta.-amidoalkyl estradiols were prepd. These compds. were studied in comparison with tamoxifen (TAM): in vitro, for their relative binding affinities (RBA) for mouse and MCF-7 estrogen receptors (ER) and for their antiproliferative effect on MCF-7 (estradiol or EGF/PDGF stimulated) and Ly2 human breast cancer cell lines; in vivo, for their uterotrophic/antiuterotrophic activities in the mouse and for their antitumoral activities on MCF-7 tumors implanted in nude mice. The most representative compds. are N-methyl-N-isopropyl-(3,17.beta.-dihydroxy-estra-1,3,5(10)-trien-11.beta.-yl)-undecanamide (RU 51625) (I) and its 17.alpha.-ethynyl deriv. (RU 53637). They showed good RBAs for ER and a stronger antiproliferative effect than TAM in vitro. Unlike TAM, these compds. inhibited growth factor-stimulated MCF-7 proliferation, and the growth of the TAM-resistant cell line Ly2. In vivo, they were completely

devoid of uterotrophic activity, when given s.c. in mice, but exhibited a slight agonistic effect when administered orally. They showed interesting antitumor activities in nude mice by the percutaneous route, but RU 53637 was more potent than RU 51625 when given orally.

IT 134411-55-5P, RU 51625 134411-57-7P, RU 53637  
134411-74-8P, RU 50667 134413-30-2P, RU 54485

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and antiestrogen and antitumor activity of)

L8 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1992:214774 HCAPLUS

DOCUMENT NUMBER: 116:214774

TITLE: 19-Norsteroids having an amide-bearing chain in the 11-beta position, their preparation, their use as medicines (especially antiestrogens), and pharmaceutical compositions thereof

INVENTOR(S): Claussner, Andre; Nique, Francois; Teutsch, Jean Georges; Van de Velde, Patrick

PATENT ASSIGNEE(S): Roussel-UCLAF, Fr.

SOURCE: Eur. Pat. Appl., 63 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

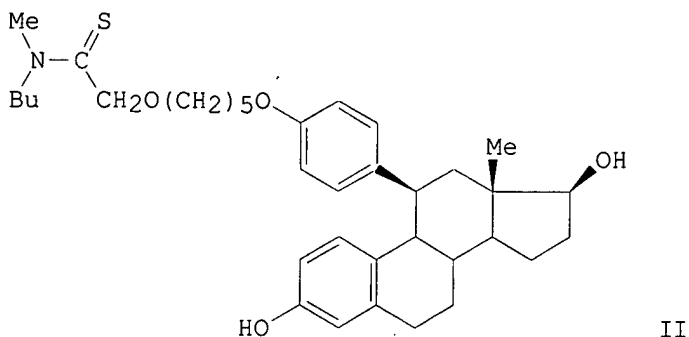
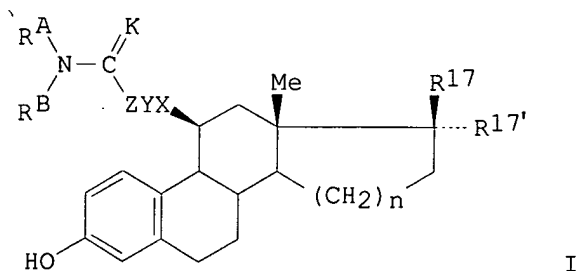
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 471612	A2	19920219	EP 1991-402214	19910809
EP 471612	A3	19920513		
EP 471612	B1	19980128		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
FR 2665901	A2	19920221	FR 1990-10323	19900814
FR 2665901	B2	19940729		
AT 162797	E	19980215	AT 1991-402214	19910809
ES 2112268	T3	19980401	ES 1991-402214	19910809
CA 2049102	AA	19920215	CA 1991-2049102	19910813
HU 59416	A2	19920528	HU 1991-2690	19910813
JP 06340688	A2	19941213	JP 1991-226410	19910813
JP 3073803	B2	20000807		
AU 9182422	A1	19920220	AU 1991-82422	19910814
AU 644671	B2	19931216		
ZA 9106420	A	19921028	ZA 1991-6420	19910814
US 5707982	A	19980113	US 1993-68735	19930528

PRIORITY APPLN. INFO.:

FR 1990-10323	A	19900814
FR 1989-2384	A	19890224
US 1990-484424	A2	19900223
US 1991-745289	B1	19910814

OTHER SOURCE(S): MARPAT 116:214774

GI



AB Twenty title steroids I [either (1)  $n = 1$ ;  $K = O$ ;  $R_{17} = OH$ ,  $O_2C(CH_2)_2CO_2H$  or salts;  $R_{17}' = H$ , C.tplbond.CH;  $RA = Me$ ;  $RB = iso-Pr$ , Bu, heptafluorobutyl;  $X = CH_2$ ,  $C_6H_4$ ,  $OC_6H_4$ ;  $Y = (CH_2)_7$ ,  $(CH_2)_8$ ,  $(CH_2)_5C.tplbond.C$ ,  $(CH_2)_qOCH_2$  with  $q = 5-7$ ,  $(CH_2)_5S(O)_pCH_2$  with  $p = 0-2$ ;  $Z =$  bond; or (2)  $n = 1$  or 2;  $K = O$ , S;  $R_{17} = OH$ , acyloxy;  $R_{17}' = H$ , (substituted) alkyl, alkenyl, or alkynyl; or  $R_{17}R_{17}' =$  keto;  $X = CH_2$ , arylene,  $OCH_2$ , oxyarylene, thioarylene (bound to steroid at C atom);  $Y =$  aliph. chain optionally unsatd. or interrupted by arylene, O, S, SO, or  $SO_2$ ;  $Z =$  bond;  $RA, RB = H$ , (substituted) alkyl; or  $RARB =$  atoms to form (substituted) heterocycle; addnl. restrictions] were prepd. as antiestrogens for treatment of hormone-dependent tumors. For example, 11.beta.-(4-hydroxyphenyl)estra-4,9-diene-3,17-dione was etherified with BuNMeCOCH<sub>2</sub>O(CH<sub>2</sub>)<sub>5</sub>Br (prepn. given), followed by isomerization to a 3-hydroxyestra-1,3,5(10)-triene, redn. of the 17-oxo group to 17.beta.-OH with NaBH<sub>4</sub>, protection of the OH groups as acetates, conversion of the amide to a thioamide with Lawesson's reagent, and deprotection, to give title compd. II. The IC<sub>50</sub> of II for inhibiting growth of MCF-7 mammary tumor cells in vitro was 0.03 nM. A tablet formulation comprising I is given.

IT **140712-19-2P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as antiestrogenic antitumor agent)

L8 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:656464 HCAPLUS  
DOCUMENT NUMBER: 115:256464  
TITLE: Preparation of 19-norsteroids containing an amide or a carboxamide group as drugs  
INVENTOR(S): Claussner, Andre; Nedelec, Lucien; Philibert, Daniel; Van de Velde, Patrick  
PATENT ASSIGNEE(S): Roussel-UCLAF, Fr.  
SOURCE: Eur. Pat. Appl., 128 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 384842	A1	19900829	EP 1990-400493	19900222
EP 384842	B1	19931229		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL				
FR 2643638	A1	19900831	FR 1989-2384	19890224
FR 2643638	B1	19910614		
HU 55032	A2	19910429	HU 1990-273	19900125
HU 207341	B	19930329		
ZA 9001356	A	19910424	ZA 1990-1356	19900222
AT 99320	E	19940115	AT 1990-400493	19900222
ES 2062431	T3	19941216	ES 1990-400493	19900222
CA 2010826	AA	19900824	CA 1990-2010826	19900223
AU 9050072	A1	19900830	AU 1990-50072	19900223
AU 631853	B2	19921210		
JP 02268194	A2	19901101	JP 1990-41383	19900223
JP 3009169	B2	20000214		
US 5149696	A	19920922	US 1990-484424	19900223
PL 162151	B1	19930930	PL 1990-283941	19900223
CN 1046166	A	19901017	CN 1990-101580	19900224
US 5290771	A	19940301	US 1992-875460	19920429
US 5707982	A	19980113	US 1993-68735	19930528
PRIORITY APPLN. INFO.:			FR 1989-2384	A 19890224
			EP 1990-400493	A 19900222
			US 1990-484424	A3 19900223
			FR 1990-10323	A 19900814
			US 1991-745289	B1 19910814
OTHER SOURCE(S):			CASREACT 115:256464; MARPAT 115:256464	
GI				

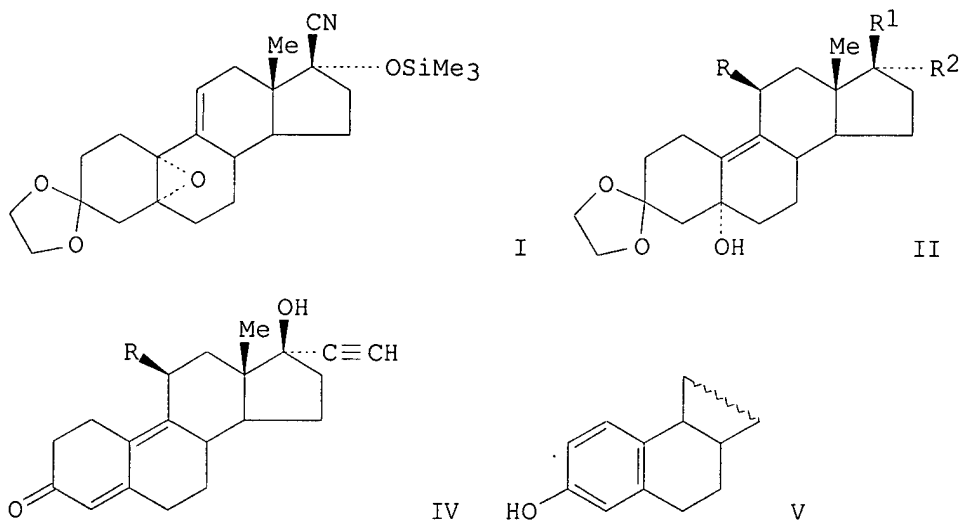
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title compds. [I; R, R1 = H, (substituted) alkyl; or NRR1 = (substituted) heterocyclyl; R2 = OH, acyloxy; R3 = H, (substituted) alkyl, alkenyl, alkynyl; or R2R3 = O; X = CH2, arylene, CH2O, aryleneoxy linked to the steroid moiety by C; Y = bond, (substituted) aliph. chain; Z = bond, CH2O linked to Y by C; rings A and B may be (2-substituted) Q, Q1; R4 = H, alkyl], having affinities for receptors of hormones, e.g., estrogen, androgen, progesterone, and therefore useful as inhibitors of hormone-dependent tumors and many other ailments, were prepd. Estradienone II [R5 = OH] [prepd. in several steps from epoxyestrenedione III and p-Me3CSiMe2O(CH2)8C6H4Br] was amidated with HNMeBu to give II (R5 = NMeBu), which was enol-esterified with AcBr and the product hydrolyzed to give I [R = Me, R1 = Bu, X = C6H4, Y = (CH2)7, Z = bond, R2 = OH, rings A and B = Q1, R3 = R4 = H]. This had an IC50 of 0.04 .mu.M against the growth of mammary tumor cells.

IT 134411-55-5P 134411-56-6P 134411-57-7P  
 134411-58-8P 134411-61-3P 134411-65-7P  
 134411-66-8P 134411-67-9P 134411-68-0P  
 134411-71-5P 134411-73-7P 134411-74-8P  
 134411-77-1P 134411-78-2P 134411-81-7P  
 134411-83-9P 134413-12-0P 134413-14-2P  
 134413-15-3P 134413-18-6P 134413-19-7P  
 134413-20-0P 134413-22-2P 134413-24-4P  
 134413-25-5P 134413-28-8P 134413-29-9P  
 134413-30-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of, as drug)

L8 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2003 ACS  
 ACCESSION NUMBER: 1981:498135 HCAPLUS  
 DOCUMENT NUMBER: 95:98135  
 TITLE: Regio and stereospecific synthesis of  
 11.beta.-substituted 19-norsteroids. Influence of  
 11.beta.-substitution on progesterone receptor  
 affinity - (1)  
 AUTHOR(S): Belanger, A.; Philibert, D.; Teutsch, G.  
 CORPORATE SOURCE: Cent. Rech., Roussel-UCLAF, Romainville, 93230, Fr.  
 SOURCE: Steroids (1981), 37(4), 361-82  
 CODEN: STEDAM; ISSN: 0039-128X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB Epoxyestrene I was treated with  $R_2CuLi$  ( $R = \text{alkyl, aryl}$ ) or  $RMgX$  ( $X = \text{halo}$ )- $CuCl$  to give estrenols II ( $R_1 = \text{cyano}$ ,  $R_2 = OSiMe_3$ ), which was ethynylated to norpregnenyediols II ( $R_1 = OH$ ,  $R_2 = C.tplbond.CH$ ) (III). The concomitant deketalization and dehydration of III gave norpregnadienydiols IV, which were aromatized to norpregnatrienydiols V. The relative affinities for the progestin and estrogen receptors showed very specific interactions between the progesterone receptor and the unsatd. substituents at C-11 of V.

IT **78793-16-5P**  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

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FILE COVERS 1907-1966  
 FILE LAST UPDATED: 01 May 1997 (19970501/UP)



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FILE 'REGISTRY' ENTERED AT 16:05:48 ON 31 MAR 2003  
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 30 MAR 2003 HIGHEST RN 500991-80-0  
DICTIONARY FILE UPDATES: 30 MAR 2003 HIGHEST RN 500991-80-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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=> d reg 17 tot

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2	RN	367269-93-0	REGISTRY
3	RN	367269-92-9	REGISTRY
4	RN	367269-91-8	REGISTRY
5	RN	367269-90-7	REGISTRY
6	RN	367269-89-4	REGISTRY
7	RN	367269-82-7	REGISTRY
8	RN	367269-81-6	REGISTRY
9	RN	367269-80-5	REGISTRY
10	RN	367269-79-2	REGISTRY
11	RN	367269-67-8	REGISTRY
12	RN	367269-66-7	REGISTRY
13	RN	342899-25-6	REGISTRY
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15	RN	342899-00-7	REGISTRY

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17	RN	342898-98-0	REGISTRY
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20	RN	342898-92-4	REGISTRY
21	RN	342898-91-3	REGISTRY
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98	RN	134413-12-0	REGISTRY
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100	RN	134411-81-7	REGISTRY
101	RN	134411-78-2	REGISTRY
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114	RN	134411-55-5	REGISTRY
115	RN	78793-16-5	REGISTRY

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=> d ide can 17 1 5 10 13 15 16 20 24 30 35 40 45 50 55 60 65 68 70 72 73 74 75 78 80 85  
86 87 90 95 99 100 105 110 115

L7 ANSWER 1 OF 115 REGISTRY COPYRIGHT 2003 ACS

RN 367269-94-1 REGISTRY

CN Estra-1,3,5(10)-triene-3,17-diol, 8-ethenyl-11-hexyl-, 3-acetate,  
(11.beta.,17.beta.)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 11.beta.-Hexyl-8.beta.-vinyl-1,3,5(10)-triene-3,17.beta.-diol 3-acetate

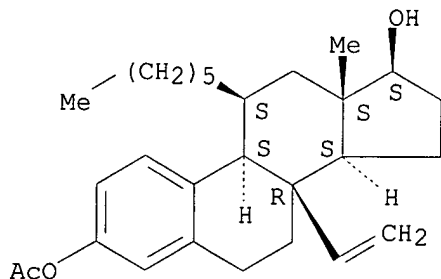
FS STEREOSEARCH

MF C28 H40 O3

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

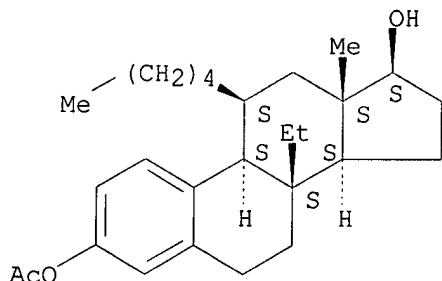
REFERENCE 1: 135:318607

L7 ANSWER 5 OF 115 REGISTRY COPYRIGHT 2003 ACS  
RN 367269-90-7 REGISTRY  
CN Estra-1,3,5(10)-triene-3,17-diol, 8-ethyl-11-pentyl-, 3-acetate,  
(11.beta.,17.beta.)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 8.beta.-Ethyl-11.beta.-pentyl-1,3,5(10)-triene-3,17.beta.-diol 3-acetate  
FS STEREOSEARCH  
MF C27 H40 O3  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 135:318607

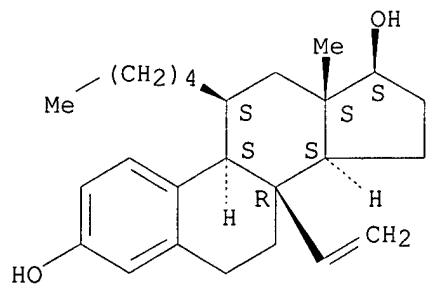
L7 ANSWER 10 OF 115 REGISTRY COPYRIGHT 2003 ACS  
RN 367269-79-2 REGISTRY  
CN Estra-1,3,5(10)-triene-3,17-diol, 8-ethenyl-11-pentyl-,  
(11.beta.,17.beta.)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 11.beta.-Pentyl-8.beta.-vinylestra-1,3,5(10)-triene-3,17.beta.-diol  
FS STEREOSEARCH  
MF C25 H36 O2  
SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



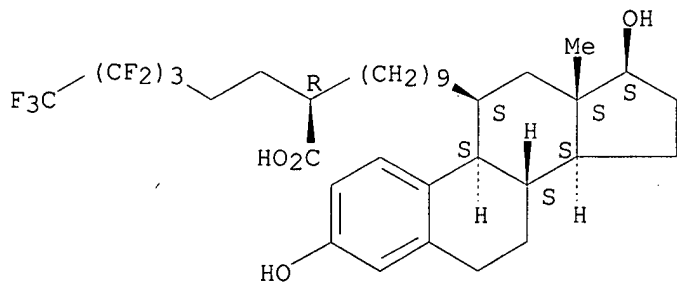
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1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 135:318607

L7 ANSWER 13 OF 115 REGISTRY COPYRIGHT 2003 ACS  
RN 342899-25-6 REGISTRY  
CN Estra-1,3,5(10)-triene-11-undecanoic acid, 3,17-dihydroxy-.alpha.-  
(3,3,4,4,5,5,6,6,6-nonafluorohexyl)-, (.alpha.R,11.beta.,17.beta.)- (9CI)  
(CA INDEX NAME)  
FS STEREOSEARCH  
MF C35 H47 F9 O4  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

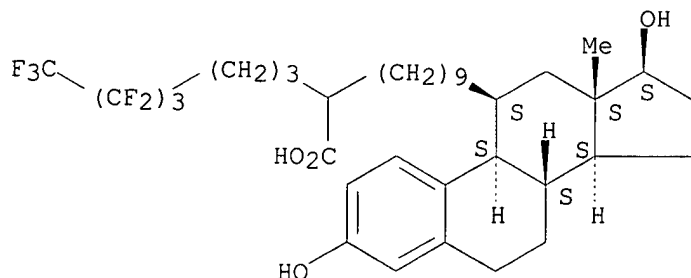
1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 135:19815

L7 ANSWER 15 OF 115 REGISTRY COPYRIGHT 2003 ACS  
RN 342899-00-7 REGISTRY  
CN Estra-1,3,5(10)-triene-11-undecanoic acid, 3,17-dihydroxy-.alpha.-  
(4,4,5,5,6,6,7,7,7-nonafluoroheptyl)-, (11.beta.,17.beta.)- (9CI) (CA  
INDEX NAME)  
FS STEREOSEARCH  
MF C36 H49 F9 O4

SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



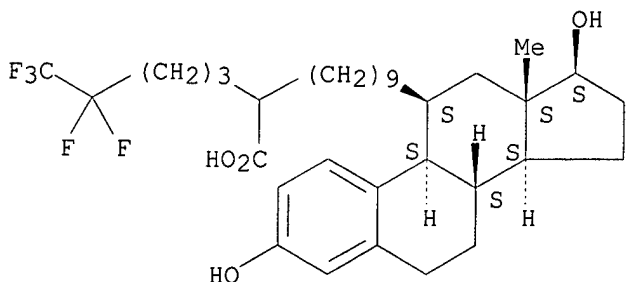
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1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 135:19815

L7 ANSWER 16 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 342898-99-1 REGISTRY  
 CN Estra-1,3,5(10)-triene-11-undecanoic acid, 3,17-dihydroxy-.alpha.-(4,4,5,5,5-pentafluoropentyl)-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C34 H49 F5 O4  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

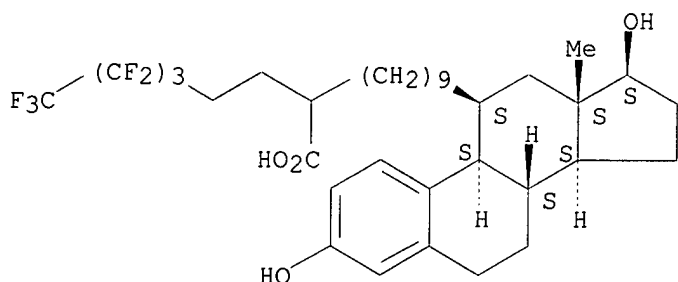
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REFERENCE 1: 135:19815

L7 ANSWER 20 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 342898-92-4 REGISTRY  
 CN Estra-1,3,5(10)-triene-11-undecanoic acid, 3,17-dihydroxy-.alpha.-(3,3,4,4,5,5,6,6,6-nonfluorohexyl)-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH

MF C35 H47 F9 O4  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



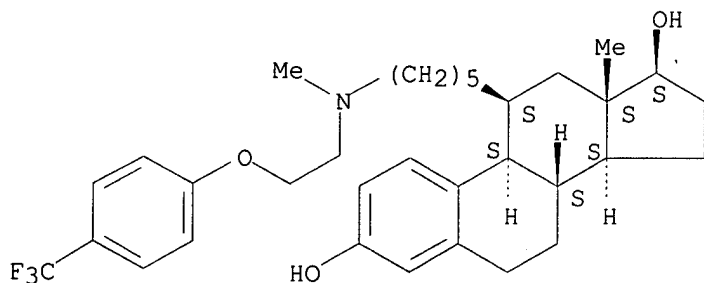
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1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 135:19815

L7 ANSWER 24 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-90-4 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-[methyl[2-[4-(trifluoromethyl)phenoxy]ethyl]amino]pentyl]-, (11.beta.,17.beta.)- (9CI)  
 (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C33 H44 F3 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

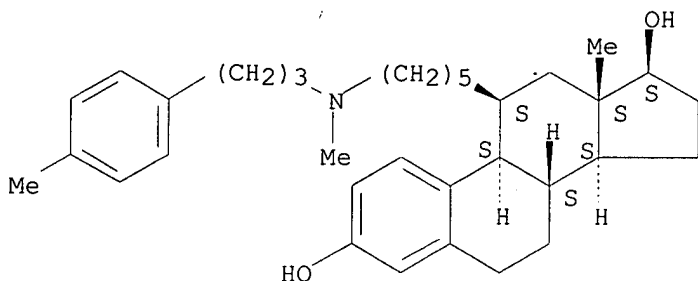
1 REFERENCES IN FILE CA (1962 TO DATE)  
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REFERENCE 1: 134:56837

L7 ANSWER 30 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-84-6 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-[methyl[3-(4-methylphenyl)propyl]amino]pentyl]-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH  
 MF C34 H49 N O2  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



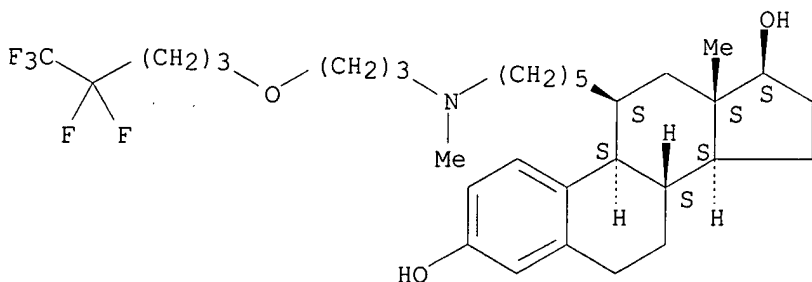
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
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REFERENCE 1: 134:56837

L7 ANSWER 35 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-79-9 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-[methyl[3-[(4,4,5,5,5-pentafluoropentyl)oxy]propyl]amino]pentyl]-, (11.beta.,17.beta.)- (9CI)  
 (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C32 H48 F5 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

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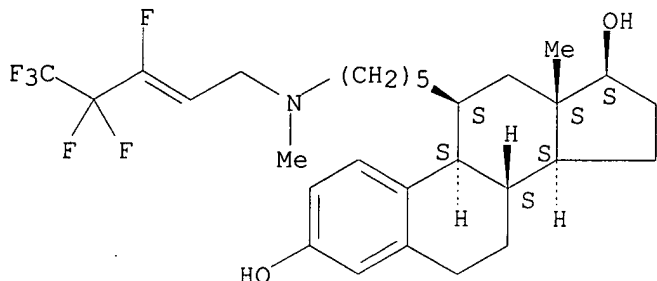
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L7 ANSWER 40 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-74-4 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-[(3,4,4,5,5,5-hexafluoro-2-pentenyl)methylamino]pentyl]-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)



FS STEREOSEARCH  
 MF C29 H39 F6 N O2  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.  
 Double bond geometry unknown.



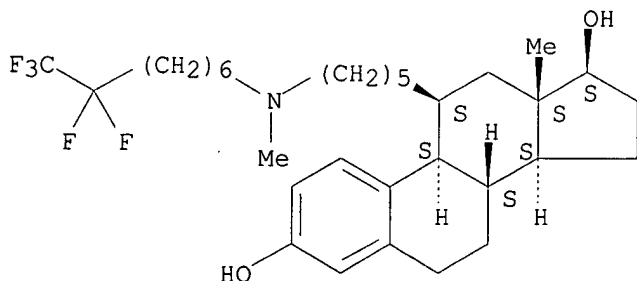
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 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 134:56837

L7 ANSWER 45 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-69-7 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-[methyl(7,7,8,8,8-pentafluorooctyl)amino]pentyl]-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C32 H48 F5 N O2  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

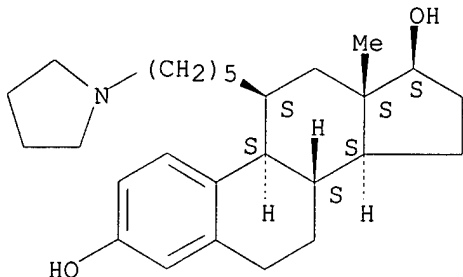
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REFERENCE 1: 134:56837

L7 ANSWER 50 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-64-2 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-(1-pyrrolidinyl)pentyl]-,

(11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C27 H41 N O2  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



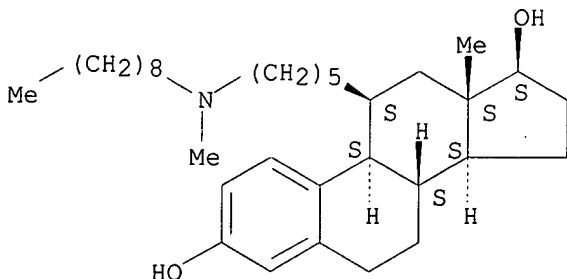
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REFERENCE 1: 134:56837

L7 ANSWER 55 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-59-5 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-(methylnonylamino)pentyl]-,  
 (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C33 H55 N O2  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

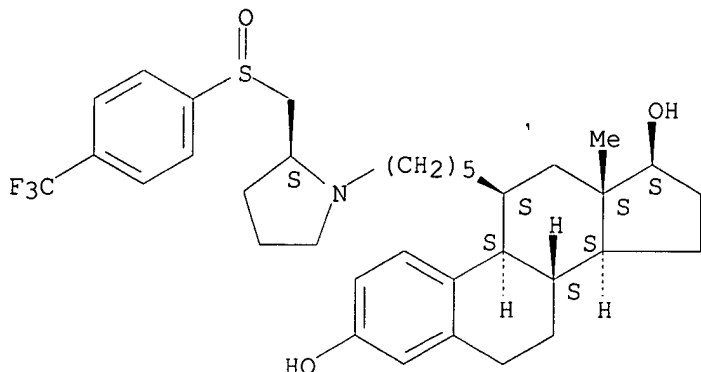
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REFERENCE 1: 134:56837

L7 ANSWER 60 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-33-5 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-[(2S)-2-[[[4-(trifluoromethyl)phenyl]sulfinyl]methyl]-1-pyrrolidinyl]pentyl]-,  
 (11.beta.,17.beta.)-

(11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C35 H46 F3 N O3 S  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



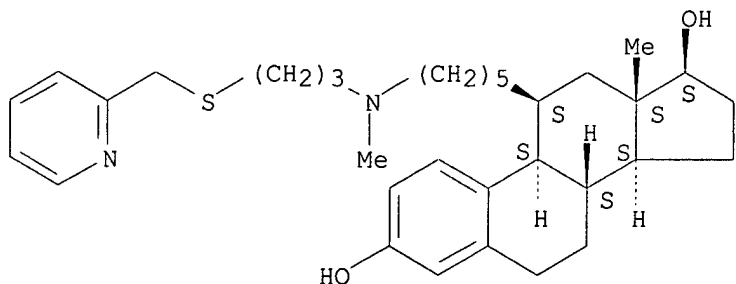
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1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 134:56837

L7 ANSWER 65 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-28-8 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-[methyl[3-[(2-pyridinylmethyl)thio]propyl]amino]pentyl]-, (11.beta.,17.beta.)- (9CI)  
 (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C33 H48 N2 O2 S  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry. Rotation (+).



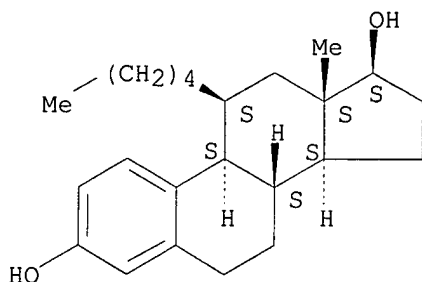
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1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 134:56837

L7 ANSWER 68 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 271260-12-9 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-pentyl-, (11.beta.,17.beta.)- (9CI)  
 (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C23 H34 O2  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



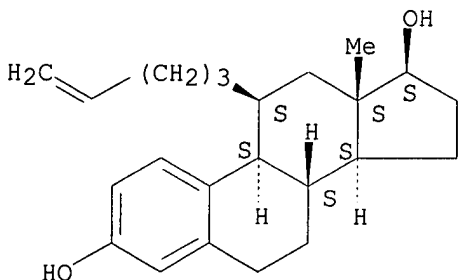
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 133:4848

L7 ANSWER 70 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 271260-07-2 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-(4-pentenyl)-, (11.beta.,17.beta.)-  
 (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C23 H32 O2  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

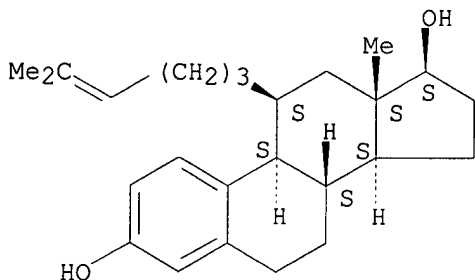
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REFERENCE 1: 133:4848

L7 ANSWER 72 OF 115 REGISTRY COPYRIGHT 2003 ACS

RN 271259-96-2 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-(5-methyl-4-hexenyl)-,  
 (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C25 H36 O2  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



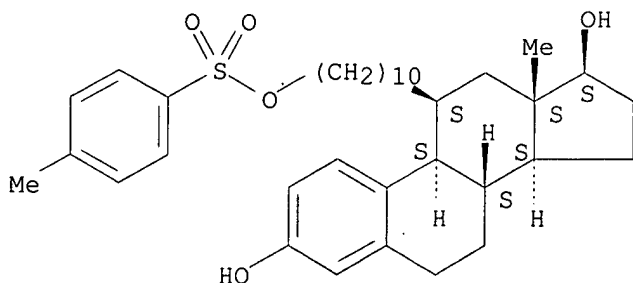
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

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REFERENCE 1: 133:4848

L7 ANSWER 73 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 191486-92-7 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[10-[[4-methylphenyl)sulfonyl]oxy]decyl]-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C35 H50 O5 S  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

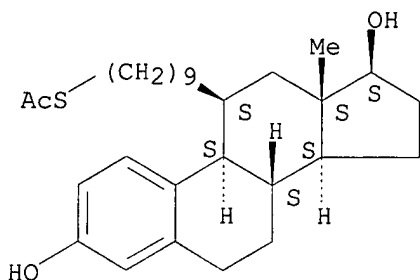
1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 127:76140

L7 ANSWER 74 OF 115 REGISTRY COPYRIGHT 2003 ACS

RN 151556-42-2 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[9-(acetylthio)nonyl]-,  
 (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C29 H44 O3 S  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



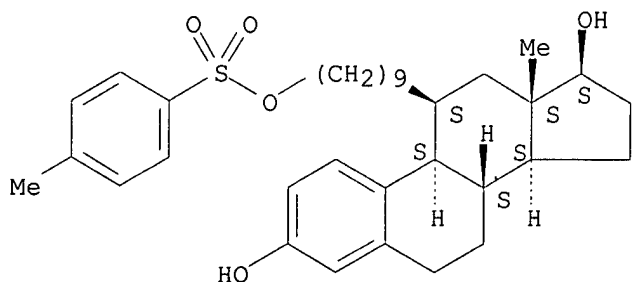
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 120:31023

L7 ANSWER 75 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 151556-41-1 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[9-[[4-methylphenyl)sulfonyl]oxy]non  
 yl]-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C34 H48 O5 S  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

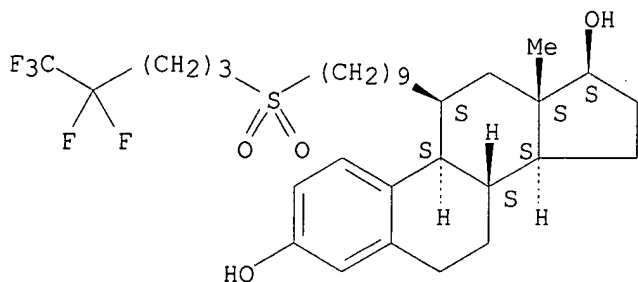
1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 120:31023

L7 ANSWER 78 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 151555-76-9 REGISTRY

CN Estra-1,3,5(10)-triene-3,17-diol, 11-[9-[(4,4,5,5,5-pentafluoropentyl)sulfonyl]nonyl]-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C32 H47 F5 O4 S  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



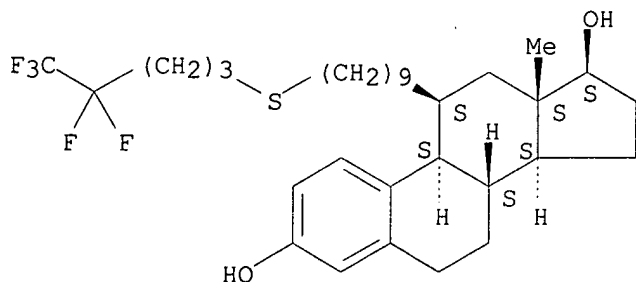
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 120:31023

L7 ANSWER 80 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 151555-54-3 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[9-[(4,4,5,5,5-pentafluoropentyl)thio]nonyl]-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C32 H47 F5 O2 S  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

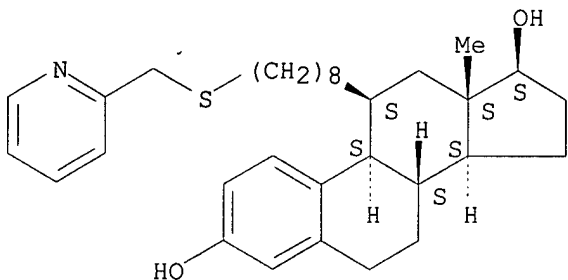
1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 120:31023

L7 ANSWER 85 OF 115 REGISTRY COPYRIGHT 2003 ACS

RN 151555-16-7 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[8-[(2-pyridinylmethyl)thio]octyl]-,  
 (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C32 H45 N O2 S  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



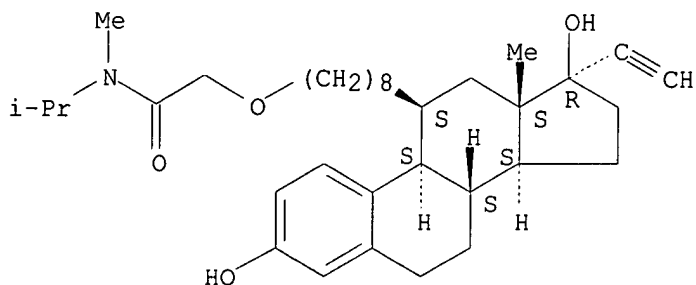
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 120:31023

L7 ANSWER 86 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 140712-19-2 REGISTRY  
 CN Acetamide, 2-[[8-[(11.beta.,17.alpha.)-3,17-dihydroxy-19-norpregna-  
 1,3,5(10)-trien-20-yn-11-yl]octyl]oxy]-N-methyl-N-(1-methylethyl)- (9CI)  
 (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 19-Norpregnane, acetamide deriv.  
 FS STEREOSEARCH  
 MF C34 H51 N O4  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 116:214774

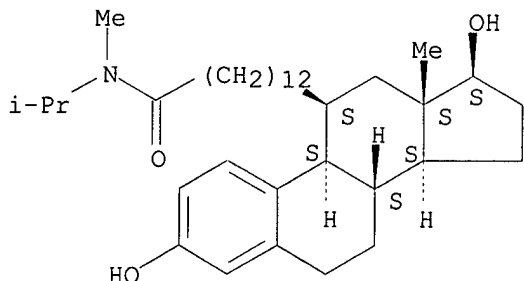


L7 ANSWER 87 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 134413-30-2 REGISTRY  
 CN Estra-1,3,5(10)-triene-11-tridecanamide, 3,17-dihydroxy-N-methyl-N-(1-methylethyl)-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN RU 54485  
 FS STEREOSEARCH  
 MF C35 H57 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1962 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

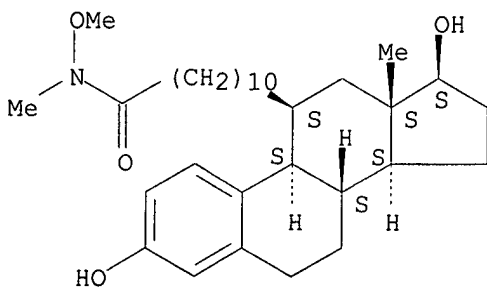
REFERENCE 1: 117:1107

REFERENCE 2: 115:256464

L7 ANSWER 90 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 134413-25-5 REGISTRY  
 CN Estra-1,3,5(10)-triene-11-undecanamide, 3,17-dihydroxy-N-methoxy-N-methyl-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH  
 MF C31 H49 N O4  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

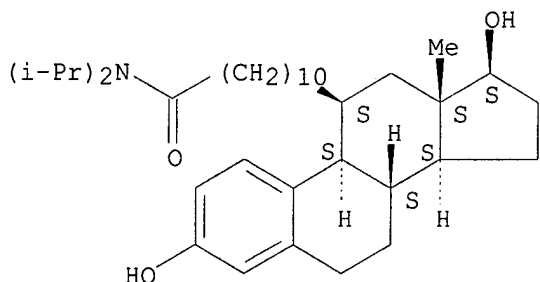
1 REFERENCES IN FILE CA (1962 TO DATE)

## 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 115:256464

L7 ANSWER 95 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 134413-18-6 REGISTRY  
 CN Estra-1,3,5(10)-triene-11-undecanamide, 3,17-dihydroxy-N,N-bis(1-methylethyl)-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C35 H57 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



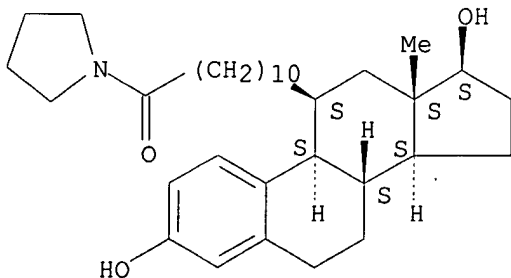
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 115:256464

L7 ANSWER 99 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 134411-83-9 REGISTRY  
 CN Pyrrolidine, 1-[11-[(11.beta.,17.beta.)-3,17-dihydroxyestra-1,3,5(10)-trien-11-yl]-1-oxoundecyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Estrane, pyrrolidine deriv.  
 FS STEREOSEARCH  
 MF C33 H51 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



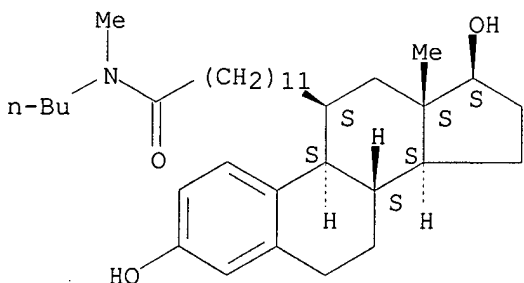
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 115:256464

L7 ANSWER 100 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 134411-81-7 REGISTRY  
 CN Estra-1,3,5(10)-triene-11-dodecanamide, N-butyl-3,17-dihydroxy-N-methyl-,  
 (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C35 H57 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL

Absolute stereochemistry.



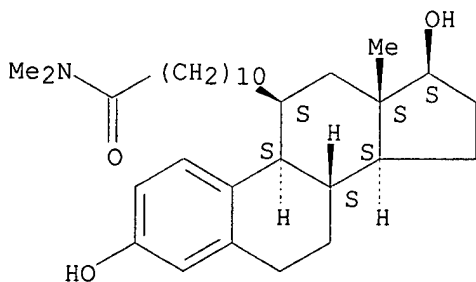
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 115:256464

L7 ANSWER 105 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 134411-71-5 REGISTRY  
 CN Estra-1,3,5(10)-triene-11-undecanamide, 3,17-dihydroxy-N,N-dimethyl-,  
 (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C31 H49 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

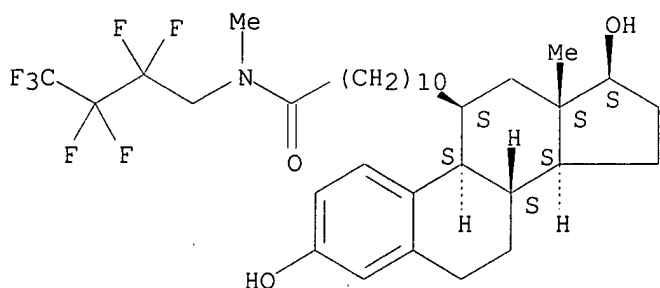
1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 115:256464

L7 ANSWER 110 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 134411-61-3 REGISTRY  
 CN Estra-1,3,5(10)-triene-11-undecanamide, N-(2,2,3,3,4,4,4-heptafluorobutyl)-  
 3,17-dihydroxy-N-methyl-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C34 H48 F7 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



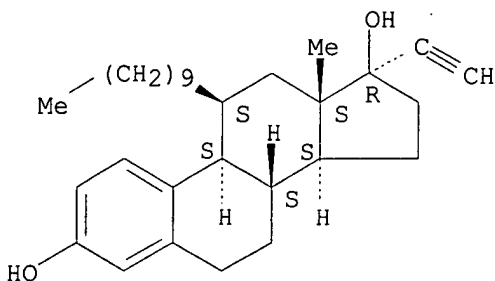
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 115:256464

L7 ANSWER 115 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 78793-16-5 REGISTRY  
 CN 19-Norpregna-1,3,5(10)-trien-20-yne-3,17-diol, 11-decyl-,  
 (11.beta.,17.alpha.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C30 H44 O2  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 95:98135